

Fig. 4. Microfluidic device and worm tracking. (A) Movement of a wild-type *C. elegans* worm is tracked through a 600-s video where it shows distinct periods of being active, semiactive, and inactive. An active worm has relatively high velocity and smaller curvature, whereas an inactive worm displays minimal velocity and larger curvature. (B) Tracks of the same worm [as in (A)] are shown during the active, semi-active, and inactive periods (i to iii). The active worm has relatively straight tracks with a smaller curvature, whereas the inactive worm shows considerable struggle with minimal displacement and a larger curvature. Scale bars, 400 mm.